

REMARKS

The corrections indicated on page 2 of the Office Action have now been made by applicants, including the amendment to the specification as provided herein. The applicants thank the Examiner for bringing these matters to their attention.

Claims 39-53, 61-69, 71-74, 76-79, 83 and 87 are currently pending in the application.

Claims 39, 42-52, 61-65, 68, 74 and 76-79 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Furie et al. (EP 0496832). This ground of rejection is respectfully traversed.

Furie et al. relates to a method for inhibiting the binding of cells, such as platelets, bearing P-selectin and a P-selectin ligand through the use of, for instance, an antibody to P-selectin ((PADGEM). The Furie et al. reference does not disclose that P-selectin antibodies can be used to inhibit the interaction of both P-selectin, and E-selectin and a ligand of E-selectin as required by the present claims. In fact, Furie et al is completely silent as to E-selectin (ELAM-1), and accordingly, the reference fail to enable antibodies which are capable of inhibiting the interaction of E-selectin and a ligand of E-selectin..

The Examiner states, or implies, that the antibodies of Furie et al. inherently inhibit the interaction of E-selectin and a ligand of E-selectin as presently claimed by applicants. The Examiner further states that this is a “mechanism of action” that lacks patentable significance, and that the recognition of “latent properties” does not result in patentability. Applicants strongly disagree with these concepts as applied to the present claims.

It is applicants’ position that the mere fact that an antibody inhibits P-selectin, as in Furie et al., does not inherently mean that it will also inhibit E-selectin as contended in the Office Action. The present claims specifically recite that the antibodies of the invention must have the property of being capable of inhibiting **both** P-selectin (PADGEM) and E-selectin binding. This is neither a latent property nor an inherent characteristic of such antibodies, as explained in more detail below. In fact, this is a functional characteristic of applicants’ claimed antibodies that is specifically set forth in the instant claims.

In support of the above proposition, enclosed with this Amendment are the pertinent portions of a Declaration Under 37 C.F.R. 1.132 of Denisa Wagner, a co-inventor of the above-

identified patent application. Dr. Wagner's credentials are summarized in the exhibits section of the Declaration. The Declaration was filed in parent application USSN 08/948,393, filed October 10, 1997, in response to a similar rejection made in that application. The pertinent portions of the Declaration, for purposes of the present Office Action, are paragraphs 1-5 and 13-15. In summary, these paragraphs state that (1) an agent that inhibits P-selectin binding does not also inherently inhibit E-selectin, and (2) it is unexpected that an agent that inhibits both P-selectin and E-selectin binding would have enhanced effectiveness in treating atherosclerosis.

The Wagner Declaration is submitted to rebut the Examiner's contention that the inhibition of both P-selectin and E-selectin is inherent in the antibodies described in Furie et al. In view of the Declaration, there is no basis for drawing any such conclusion. Applicants' note that the Wagner Declaration is not contradicted by any of the references cited by the Examiner.

Claims 39, 42-52, 61-65, 71-74 and 76 have been rejected under 35 U.S.C. 102(b) as being anticipated by Palabrica et al. (WO 93/06863). This ground of rejection is traversed.

Palabrica et al. relates to the use of P-selectin antibodies to inhibit vascular narrowing associated with post-angioplasty restenosis. Palabrica et al. is concerned with the therapeutic use of P-selectin antibodies following a surgical procedure, and there is no disclosure in the reference regarding the use of P-selectin antibodies to prevent or inhibit atherosclerosis. Moreover, there is also no disclosure in the reference that the antibodies must be capable of inhibiting both P-selectin and E-selectin binding with their respective ligands.

The Examiner has asserted that applicants' claimed methods would be inherent from the methods described in Palabrica et al. involving the inhibition of vascular narrowing following angioplasty as described in the reference. However, applicants' point out that the procedures described in the reference are directed to the treatment of restenosis rather than the treatment of atherosclerosis. Restenosis is short term condition, while atherosclerosis is a long term, chronic condition. Moreover, there is no basis for assuming that the antibodies of Palabrica et al. would be effective for inhibiting both PADGEM and E-selectin binding since, as discussed above, the reference only describes activity toward PADGEM.

Claims 39-52, 61-65, 68 and 73-74 have been rejected under 35 U.S.C. 102(a)(e) as being anticipated by McEver et al. This ground of rejection is also traversed.

McEver et al. describe a method for modulating an inflammatory response in a patient by treating the patient with inhibitors for GMP-140, such as through the use of GMP-140

antibodies. The inflammatory responses described in the reference include circulatory shock, organ transplant rejection, myocardial infarction and acute respiratory distress syndrome. Atherosclerosis is not an inflammatory condition as that term is used in the McEver et al. reference, and this condition mentioned in the reference.

Further, there is no indication from the McEver et al. reference that GMP-140 antibodies would also be useful to prevent the binding of E-selectin to a ligand of E-selectin as required in the present claims. McEver et al. draw a distinction between GMP-140 and ELAM-1 as shown in col. 17 of the reference.

Claims 39-52, 57, 61-68, 71-74 and 76-79 stand rejected under 35 U.S.C. 103(a) as obvious over the combination of Furie et al., and/or Palabrica et al., and/or McEver et al., in view of the known combination therapies used in the treatment of atherosclerosis as taught by Coller et al. (U.S. Patent No. 5,976,532) and/or admissions contained in the instant specification. This ground of rejection is traversed.

The Furie et al., Palabrica et al. and McEever et al. references have been discussed and distinguished above. previously. These references, either singly or in combination, fail to teach or suggest the methods and therapeutic agents of the present invention since the references do not disclose P-selectin antibodies which are effective for inhibiting both P-selectin and E-selectin binding with their respective ligands. These deficiencies are not cured by the Coller et al. reference which has been cited only for its disclosure of the use of combination therapies and vessel corrective techniques.

The present specification does not contain an admission that any aspect of the presently claimed invention is known in the art. The statement on pages 12-16 of the specification regarding administration of the therapeutic agent is part of the description of the methods for using the invention, and is not an acknowledgement that the present invention has been used in this manner by others.

In view of the foregoing facts and reasons, the present application is now believed to overcome the remaining rejections, and to be in proper condition for allowance. Accordingly, reconsideration and withdrawal of the rejections, and favorable action on this application, is solicited. Reconsideration of the Wagner Declaration is appropriate at this time since it is of record in the parent application, and therefore does not create any new issues. The Examiner is

invited to contact the undersigned at the telephone number listed below to discuss the status of this application.

Respectfully submitted,

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Date: January 20, 2004